

**CLAIMS**

1. A control apparatus controlling a predetermined  
information processing apparatus, characterized by  
5 comprising:

detection means for detecting an information processing  
apparatus through wireless communication;

first acquisition means for acquiring respective  
operation screen information of a plurality of said information  
10 processing apparatuses if said plurality of information  
processing apparatuses is detected by said detection means,  
said first acquisition means being acquisition means for  
acquiring said operation screen information for displaying  
said operation screen that is to be operated when said  
15 information processing apparatus is controlled;

editing means for editing said plurality of operation  
screen information so that said plurality of operation screens  
is displayed in a single display region if said plurality of  
operation screen information is acquired by said first  
20 acquisition means;

display means for displaying said operation screens  
based on said operation screen information edited by said  
editing means; and

control means for controlling said information  
25 processing apparatuses based on an input provided from said  
operation screens displayed by said display means.

2. The control apparatus according to claim 1,  
characterized in that said first acquisition means acquires  
30 said operation screen information from said information  
processing apparatus through said wireless communication.

3. The control apparatus according to claim 1, characterized in that said first acquisition means acquires said operation screen information from a predetermined server  
5 managing said operation screen information through said wireless communication.

4. The control apparatus according to claim 1, characterized by further comprising storage management means  
10 for managing storage of said already acquired operation screen information,

wherein said first acquisition means acquires said operation screen information, storage of which is managed by said storage management means.

15

5. The control apparatus according to claim 4, characterized in that said storage management means clears less frequently used operation screen information from among said operation screen information, said storage of which is  
20 managed.

6. The control apparatus according to claim 1, characterized by further comprising intensity detection means for detecting intensities of said respective radio waves  
25 emitted from said plurality of information processing apparatuses,

wherein said editing means edits, based on detection by said intensity detection means, said operation screen information so that said operation screen of said information  
30 processing apparatus that emits a high intensity radio wave is displayed by priority.

7. The control apparatus according to claim 6, characterized in that said display means determines, based on detection by said intensity detection means, whether or not said control apparatus is out of a communication coverage with said information processing apparatuses, if it is determined that said control apparatus is out of said communication coverage, said operation screen is displayed so that transparency thereof is gradually increased at every predetermined time.

8. The control apparatus according to claim 1, characterized in that said editing means edits said plurality of operation screen information so that said operation screen being operated is continuously displayed.

9. The control apparatus according to claim 1, characterized by further comprising history management means for managing a history of control of said information processing apparatus, which is performed by said control means.

10. The control apparatus according to claim 9, characterized in that said editing means edits, based on said history managed by said history management means, said operation screen information so that said operation screen of a most recently operated information processing apparatus is displayed by priority.

11. The control apparatus according to claim 9, characterized in that said editing means edits, based on said history managed by said history management means, said

operation screen information so that a most frequently used operation screen is displayed by priority.

12. The control apparatus according to claim 9,  
5 characterized in that said editing means edits, based on said history managed by said history management means, said operation screen information so that said operation screen, which is most likely to be used within a period of time including a current time, is displayed by priority.

10

13. The control apparatus according to claim 9, characterized by further comprising selection means for selecting, based on said history managed by said history management means, other information processing apparatus  
15 relevant to said information processing apparatus displaying said operation screen thereof,

wherein said editing means edits said operation screen information so that said operation screen of said other processing apparatus selected by said selection means is  
20 displayed together with said operation screen of said information processing apparatus.

14. The control apparatus according to claim 13, characterized in that said selection means selects other  
25 information processing apparatus relevant to said information processing apparatus based on a time difference between times at which said information processing apparatus and said other information processing apparatus are respectively controlled, said times being obtained from said history.

30

15. The control apparatus according to claim 1,

characterized in that said operation screen information is described in an HTML (Hyper Text Markup Language).

16. The control apparatus according to claim 1,  
5 characterized by further comprising second acquisition means for acquiring other operation screen information in accordance with a category of said information processing apparatus,  
wherein said display means displays, until said  
operation screen information is acquired by said first  
10 acquisition means, other operation screen based on said other operation screen information acquired by said second acquisition means.

17. The control apparatus according to claim 1,  
15 characterized in that if said information processing apparatus transmits said operation screen information,  
said first acquisition means transmits feature information indicating a feature of said control apparatus and acquires said operation screen information transmitted  
20 from said information processing apparatus in response to said transmission.

18. A control method of a control apparatus controlling a predetermined information processing apparatus,  
25 characterized by comprising:

a detection step of detecting said information processing apparatus through wireless communication;  
an acquisition step of acquiring operation screen information for displaying an operation screen that is to be  
30 operated when said information processing apparatus is controlled while acquiring said respective operation screen

information of a plurality of said information processing apparatuses if said plurality of information processing apparatuses is detected by a process in said detection step;

an editing step of editing said plurality of operation  
 5 screen information so that a plurality of operation screens are displayed in a single display region if said plurality of operation screen information is acquired by a process in said acquisition step;

a display step of displaying said operation screens based  
 10 on said operation screen information edited by a process in said editing step; and

a control step of controlling said information processing apparatus based on an input provided from said operation screen displayed by a process in said display step.

15

19. A recording medium recorded with a program readable by a computer, said program making a computer execute a process for controlling a predetermined information processing apparatus, characterized by comprising:

20 a detection step of detecting an information processing apparatus through wireless communication;

an acquisition step of acquiring operation screen information for displaying an operation screen that is to be operated when said information processing apparatus is  
 25 controlled while acquiring said respective operation screen information of a plurality of said information processing apparatuses if said plurality of information processing apparatuses is detected by a process in said detection step;

an editing step of editing said plurality of operation  
 30 screen information so that a plurality of operation screens is displayed in a single display region if said plurality of

operation screen information is acquired by a process in said acquisition step;

a display step of displaying said operation screen based on said operation screen information edited by a process in  
5 said editing step; and

a control step of controlling said information processing apparatus based on an input provided from said operation screen displayed by a process in said display step.

10 20. A program making a computer execute a process for controlling a predetermined information processing apparatus, characterized by comprising:

a detection step of detecting said information processing apparatus through wireless communication;

15 an acquisition step of acquiring operation screen information for displaying an operation screen that is to be operated when said information processing apparatus is controlled while acquiring said respective operation screen information of a plurality of said information processing  
20 apparatuses if said plurality of information processing apparatuses is detected by a process in said detection step;

a display step of displaying said operation screen based on said operation screen information edited by a process in said editing step; and

25 a control step of controlling said information processing apparatus based on an input provided from said operation screen displayed by a process in said display step.

21. An information processing apparatus controlling an  
30 operation thereof based on an instruction from a control apparatus, characterized by comprising:

storage means for storing operation screen information, which is a constituent element for editing of a plurality of operation screens to be edited by said control apparatus, said operation screen information being operation screen information making a control apparatus display an operation screen that is to be operated when said information processing apparatus is controlled; and

transmission means for transmitting said operation screen information stored by said storage means to said control apparatus through wireless communication in response to a request from said control apparatus.

22. The information processing apparatus according to claim 21, characterized in that said operation screen information is selected based on feature information indicating a feature of said control apparatus,

wherein said transmission means transmits said operation screen information selected based on said feature information to said control apparatus.

20

23. An information processing method of an information processing apparatus controlling an operation thereof based on an instruction from a control apparatus, characterized by comprising:

25 a storage step of storing operation screen information, which is a constituent element for editing of a plurality of operation screens to be edited by said control apparatus, said operation screen information being operation screen information making a control apparatus display an operation screen that is to be operated when said information processing apparatus is controlled; and

30



a transmission step of transmitting said operation screen information stored by a process in said storage step to said control apparatus through wireless communication in response to a request from said control apparatus.

5

24. A recording medium recorded with a program readable by a computer, said program making a computer execute a process for controlling an operation based on an instruction from a control apparatus, characterized by comprising:

10 a storage step of storing operation screen information, which is a constituent element for editing of a plurality of operation screens to be edited by said control apparatus, said operation screen information being operation screen information making a control apparatus display an operation  
15 screen that is to be operated when said information processing apparatus is controlled; and

a transmission step of transmitting said operation screen information stored by a process in said storage step to said control apparatus through wireless communication in  
20 response to a request from said control apparatus.

25. A program making a computer execute a process for controlling an operation based on an instruction from a control apparatus, characterized by comprising:

25 a storage step of storing operation screen information, which is a constituent element for editing of a plurality of operation screens to be edited by said control apparatus, said operation screen information being operation screen information making a control apparatus display an operation  
30 screen that is to be operated when said information processing apparatus is controlled; and

a transmission step of transmitting said operation screen information stored by a process in said storage step to said control apparatus through wireless communication in response to a request from said control apparatus.

5

10